

REMARKS

Initially, the undersigned attorney wishes to point out the attorney docket number for the subject application has changed from “33766WO36” to “13311 US”. Applicants request that the Patent Office corrects its records to reflect the proper attorney docket number.

The present application has claims 1-8 pending. Applicants have herein above amended claim 1 to change “catalyst” to “electrocatalyst”. Support for this amendment can be found in numerous places in the subject application, including on page 6, line 23 -- “any electrocatalyst known from the field of fuel cells may be used as catalysts.”

Applicants have also amended the specification page 3, lines 20-21, to correct a typographical/grammatical error. The phrase “...1.7 wt% of caustic soda solution (10% strength). None of these catalyst inks contain any water, only organic solvents” should read “...1.7 wt.% of sodium hydroxide solution (10% strength). These catalyst inks contain predominantly organic solvents and only small amounts of water in the form of the sodium hydroxide solution.” Applicants maintain that one of ordinary skill in the art, upon reading the present specification, would know that a caustic soda solution is the same as, and equivalent to, a sodium hydroxide solution and that such solutions contain a small amount of water. Accordingly, Applicants maintain that the amendment to the specification does not introduce new matter.

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In the Office Action dated October 20, 2004, the Examiner rejected claims 1-7 as unpatentable over Fischer (DE 196 11 510) in view Goller *et al.* (US Patent 4,185,131). Claim 8 was also rejected as unpatentable based on these references and further in view of Binder *et al.* (U.S. Publication 2002/0037449).

With respect to the Binder reference, Applicants point out that this patent application has a publication date of March 28, 2002 and a U.S. filing date of July 19, 2001. The present application claims priority to a German application filed July 29, 2000. Accordingly, Applicants submit that the Binder reference is not proper prior art under 35 U.S.C. Section 102. Applicants respectfully request that the Examiner reconsider and withdraw the rejection based on Binder.

With respect to the rejections based on Fisher and Goller, Applicants respectfully disagree with the Examiner's position. Applicants maintain that the references cannot properly be combined in the manner done so by the Examiner. As the Examiner has recognized, Fischer is silent as to the use of a linear dialcohol with a flash point higher than 100°C as an organic solvent inking vehicle. Rather, Fischer uses glycerine in the ink vehicle. Goller teaches the equivalency of glycerine and ethylene glycol but does so with respect to a different system. The inks set forth in Goller do not contain electrocatalyst material. Rather, Goller is directed to a method for application of carbon particles and a hydrophobic fluorocarbon polymer (see Summary of the Invention; also see, column 4,

lines 35-48, wherein Goller describes the making of his suspension containing graphitized carbon and PTFE). The inks taught in Goller do not contain electrocatalyst, but rather the electrocatalyst is applied after the ink is compacted and sintered (see, for example, column 2, lines 20-29; see also, column 5, lines 42-58, where it is taught that after the inking procedure set forth in Goller, the inked layer is then compacted, sintered, and compacted again, before it is ready for catalyzation).

Accordingly, Goller is not directed to an analogous ink suspension as that of Fischer or of the present invention. Moreover, as set forth in the subject application, glycerine is not the equivalent of ethylene glycol for ink suspensions containing electrocatalysts. As set forth in the application, there are serious drawbacks to the use of glycerine. For instance, the MEA requires a very long activation and conditioning period before acceptable electrical performance is obtained when glycerine is present (see page 3, lines 9-11 of the present application). The present invention solves this problem, among others, by using linear dialcohols. Accordingly, the present application itself points out that glycerine and ethylene glycol are not equivalent with respect to ink suspensions containing electrocatalysts.

Furthermore, there is no suggestion or motivation to combine the references in either of the references cited by the Examiner. The Examiner is using hindsight for this combination. A person of ordinary skill in the art, practicing the invention of Fischer, would have no motivation to look to or incorporate the teaching of Goller. There is no

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indication in either cited reference that using ethylene glycol would provide any advantage over the use of glycerine in ink suspensions. Additionally, one of ordinary skill in the art would not even consider Goller since Goller does not provide teachings with respect to electrocatalysts.

Because the claims have now been amended to restrict the catalyst to electrocatalyst, Applicants are of the position that the claims clearly are not rendered obvious by Fischer or Goller, either taken alone or in combination. In light of the arguments set forth above and the amendment to claim 1, Applicants respectfully request that the Examiner reconsider and withdrawn the rejections based on Fischer and Goller.

In accordance with their duty under 37 CFR § 1.56, Applicants also submit herewith an Information Disclosure Statement which includes the European search report issued in connection with Applicants' corresponding European application and copies of the references cited therein, where appropriate.

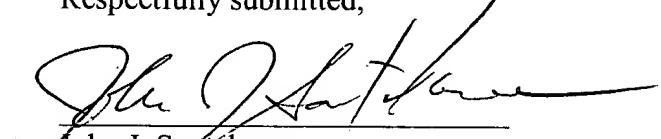
Entry of the amendments and allowance of the present application are respectfully requested.

A check in the amount of \$630 is enclosed to cover the \$450 fee for a two-month extension of time and the \$180 fee for submission of an Information Disclosure Statement. If any additional fees are due, or an overpayment has been made, please charge, or credit, our Deposit Account No. 11-0171 for such sum.

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If the Examiner has any questions regarding the present application, the Examiner is cordially invited to contact Applicants' attorney at the telephone number provided below.

Respectfully submitted,



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